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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BRENDA POMERANCE LAW OFFICE OF BRENDA POMERANCE 260 WEST 52 STREET SUITE 27B NEW YORK, NY 10019			EXAMINER MILEF, ELDA G	
			ART UNIT	PAPER NUMBER
			3628	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/802,025	<b>Applicant(s)</b> KEITH, CHRISTOPHER	
	<b>Examiner</b> Elda Milef	<b>Art Unit</b> 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-111 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-111 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 42, 93-97 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The description does not adequately disclose to one of ordinary skill in the art how to make and use the invention.

Re claim 42: "checking the disclosure level" is not adequately defined or described in the specification.

Re claims 93-97: "single point" is not adequately defined or described in the specification.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-81, 86, 89-108, 111 are rejected under 35 U.S.C. 102(e) as being anticipated by Wallman (US Patent 6,601,044).

**Re claim 1:** Wallman discloses:

automatically performing, at a trading process, market discovery according to a discovery strategy selected from a plurality of discovery strategies by a user("An embodiment of the disclosed system includes a first processor interfaced with an investor's PC to select a plurality of assets to be in the investor's portfolio based on the investor's indicated preferences, to manage the portfolio in accordance with market changes and changes in the investor's indicated preferences")-see Abstract and cols. 11-27, Figs. 1,10,15,16;

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automatically acting upon the order at the trading process according to an action strategy selected from a plurality of action strategies by the user("electronically place at least one asset trading order in accordance with the investor's indicated preferences")-see Abstract, and cols. 11-27, Figs. 1,10,15,16;

wherein the at least one market process and the trading process are software programs operative on the same trading platform ("A computer based system to which investor provides his preferences, assists investor in selecting a portfolio...and includes a device for such execution")-see col. 11, lines 30-43; ("The system electronically executes the needed transaction at the next transaction window..."), col. 26, lines 65-67 and cols. 23-28.

**Re claims 2-4,8, 45:** Wallman discloses wherein the trading process is operative on a platform supporting a plurality of trading processes able to interact with the at least one market process; the platform supports at least two market processes having respective market methodologies selected from the set of market methodologies ("the computer -based system of the present invention also allows the investor to be presented with suggested portfolios created through other means-such as a recommended portfolio that reflects a specified strategy, such

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as the ten under performing stocks from the Dow Jones Industrial Index, or a selected analyst..."-see col. 30, lines 34-41 and col.40, lines 51-58.;

discovery strategy and setting parameters (" Screen 4 (25) also elicits information from the investor that is employed in creating a risk-return preference function for the investor. Such information includes volatility levels, risk, required rate of returns (based on the above asset allocation model), etc. The utilization of various parameters to establish that function is then employed to set initial defaults, which can be modified if desired by the investor in Screen 5(26)"-see col. 29, lines 50-57.

Automatically acting includes bidding or offering at the market process based on market discovery results.-see cols.11-13.

**Re claim 5,7:** Wallman discloses wherein the discovery strategy is selected from at least two of (i)external discovery, (ii) obtain posted prices, (iii) query the market process, and (iv)query an information provider and wherein discover strategy includes discovery from at least one informal market ("individual stocks (e.g., Intel) can be analyzed over various periods of time...information can be provided to the investor...such an investor might have specific desires for stocks which might

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be expressed in terms of a desire to invest in "big companies" or "high tech" stocks...")-see cols. 17, line 9 - cols. 18, lines 1-44.

**Re claims 9,15,27-28,47-48,56,62:** Wallman discloses market discovery depends on the characteristics of the order and market process ("Therefore, as a result of the investor's desire to invest in "big companies" a series of stocks would be selected ...which fits into the characteristics desired by the investor")-see cols. 17-18, col. 18, lines 13-16 in particular.

**Re claim 6:** Wallman discloses posted prices are stored in a file accessible to all trading processes authorized by the market processes. ("a web server that stores the main program for controlling trading and investor access...")-see Overall System, col. 28, lines 11-27.

**Re claims 10,11,13,14,57,58,60,61,80:** Wallman discloses:  
the order is a short term option request and option exercise and the order has a negotiable price-see col. 40, lines 51-57;

the order is part of a linked order -see col. 21, lines 21-28.

**Re claims 12,21, 22, 59:** Wallman discloses:  
wherein the order is a trial order ("according to yet another aspect of the current invention, the investor could simply click

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on a button on the graphical investor interface and receive a proposed portfolio")-see col. 16, lines 2-20

automatically sending a trial order to a market automatically receiving a report indicating that the trial order would have been paired if it had been a regular order("Therefore, as a result of the investor's desire to invest in "big companies" a series of stocks would be selected and displayed to the investor which fits into the characteristics desired..")-see col. 18, lines 13-16 and ("suggested portfolios are created by the computer-based system") -see col. 30, lines 32-46

and wherein the report also indicates the price at which the trial order would have been paired if it had been a regular order ("The processor then transmits the actual trading pricing information regarding each asset/liability traded by a particular investor to the particular investor.")-see col. 13, lines 20-38; also see cols. 26-27.

**Re claims 16-19,63-66:** Wallman discloses:

The market process operates according to an auction methodology (see col. 8, lines 50-51); a match methodology (see col. 22, para. 5); a negotiation methodology (- see col.26, lines 46-67 - col. 27, lines 1-28); an order book with crowd price improvement methodology (Col. 11, lines 53-58).



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**Re claim 20:** Wallman discloses wherein market discovery discovers order depth information at a price other than the best price.-see col. 11, lines 53-64, col. 26, lines 1-9.

**Re claims 23-24:** Wallman discloses:

the trading process has satisfied a condition at the market process, and further comprising automatically receiving a new contra-side best market price in advance of other market participants while the condition at the market process is satisfied and wherein the condition is providing the best market price for a side of the market-see col. 26, lines 1-9.

**Re claims 25:** -see Figs. 11-13, 16 (157,168-170)

**Re claims 26,29,30-35,46,49,50,55:** Wallman discloses:

wherein the discovery and action strategy is represented in a decision table having rules, each rule having at least one condition and at least one action be to taken when the condition is satisfied.-see Fig. 15(157), cols. 23-27, 38-40, and in particular ("In the asset allocation model 1: the investor is first queried..the investor's risk tolerance and financial goals... The asset allocation model determines a percentage allocation in each of the general investment types according to a set of known tables.")-see col. 23, lines 20-40.

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wherein the decision table includes a holding tank for storing at least one order waiting for a market related event and wherein at least one of the rules also specifies a time for acting on its at least one action.-see col. 22, para.4, col. 26 lines 65-67 -col. 27, lines 1-27, col. 39, lines 24-32 and cols. 39-40.

wherein the automatically performing market discovery includes applying the decision table to process the order when the order is received; when the price discovery is completed; when a bid or offer relating to the order is received; when notice of a price improvement opportunity is received.-see cols. 39-40.

wherein the decision table includes, in at least one of a condition and an action of at least one of the rules, a nested decision table.- see cols. 39-40.

**Re claim 36,53:** the at least one action is to request information from an order room-see cols. 39-40 in particular col. 39, lines 55-60.

**Re claims 37 and 38** -see col. 22, para. 5.

**Re claim 39**-see cols. 22-28 and ("set of known tables")-col. 23 lines 35-41.

**Re claims 40-41:** the trading proposal specifies a choice of negotiation methodology; trading methodology is selected from

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personal negotiation, direct negotiation via a computer system, and brokered negotiation. -see col.26, lines 46-67 - col. 27, lines 1-28.

**Re claim 42:** The examiner is interpreting "disclosure level" as determining if the contra-party has an offsetting trade position. Wallman discloses ("the computer-based system of the present invention: enables superior trade execution of orders through netting.")-see col. 22, para. 5.

**Re claims 43 and 44:** Wallman discloses:

Providing a price inquiry to the market process, and requesting that the market process notify its crowd of a price improvement opportunity; trading at a price provided by the crowd. -see col. 11, lines 46-65

**Re claims 51,52,54:** Wallman discloses:

wherein the automatically acting includes applying the decision table to determine an action to take when notice is received of a price improvement opportunity.-see col. 11, line 53-col. 17, line 33.

wherein the automatically acting includes applying the decision table to determine an action to take when execution of the order is reported -see col. 26, line 65-col. 28, line 9.

wherein the at least one action is to transfer to

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another rule (original).-see cols. 26-28.

**Re claims 67,68:** Wallman discloses:

wherein the action strategy depends on a relationship between the trading process and the market process.

wherein the automatically acting includes routing the order to at least one of a plurality of markets.-see Abstract.

**Re claim 69:** Wallman discloses:

wherein the plurality of action strategies include at least two of (i) request information from an order room, (ii) retain the order, (iii) post the order at the market process, and (iv) join a crowd at the market process.-see col. 15, line 11- col. 18, line 16.

**Re claim 70:** Wallman discloses:

wherein posting the order includes providing discretion level information indicating data about the order that can be provided to other trading processes using the market process.-see col. 28, lines 11-37.

**Re claim 71:** Wallman discloses:

wherein posting the order includes providing an order tail indicating the markets at which the order is posted.- see col. 33, lines 44-54.

**Re claims 72-75:** Wallman discloses:

wherein the market process:

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assumes that the posted order is immediately executable;  
requests affirmation of availability before executing the order;

wherein the action strategy depends on whether the  
market process provides a selected order handling feature.

wherein the selected order handling feature is chosen  
from discretion level matching, providing a first look, and  
contra-party preference updating.

-see col. 43 lines 44-48 and col. 11, col. 22, para. 5, col. 26,  
line 65- col. 28, lines 9.

**Re claims 76 -79:** Wallman discloses:

wherein automatically acting includes determining  
that a linked order should be executed, the linked order  
including individual orders respectively associated with prices  
and quantities, and automatically sending the linked order to  
an execution process for execution such that the individual  
orders are executed only if all of the individual orders can be  
executed at the associated prices.-see col. 11, lines 46-64, and  
col. 15, lines 11-45.

wherein the automatically determining is based  
on the market discovery.-see cols. 13, 17,26, 40 (lines 39-50)

wherein the automatically determining includes  
evaluating an objective function incorporating market  
information for the individual orders in the linked order.-see

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cols. 15-17.

wherein the objective function includes at least one condition for each individual order, and wherein the automatically determining includes evaluating how many of the conditions are satisfied, and comparing the number of satisfied conditions with a threshold to decide if sufficient conditions are satisfied so that the linked order should be executed.

("According to another aspect of the present invention...aggregating the transactions of a single investor with the transactions of other investors over an applicable characteristic of the assets or liabilities...")-see col. 15, lines 11-25.

**Re claim 81:** Wallman discloses that the execution process is part of a platform process-see col 26, lines 65-67- col. 27, lines 1-26.

**Re claims 86, 89-92:** Wallman discloses:

posting the order to the at least one market process and automatically affirming availability of shares of the order to the at least one market-see col. 43, line 58- col. 44, lines 1-25.

further comprising checking availability of the shares before automatically affirming;

wherein the checking availability is based on a

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number of unpaired shares of the order and a number of in process shares of the order;

further comprising marking shares as in process after affirming their availability;

wherein the shares are marked as in process for the market to which the shares were affirmed, and further comprising summing the in process shares at all of the markets at which the order is represented to obtain an in process number of shares.

-see col. 15, lines 25-45; col. 22, pars. 4 and 5; col. 26, line 65-col. 27, lines 1-28; col. 33, lines 44-54.

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**Re claims 93-97:** The Examiner is interpreting "single point" to mean all trade transactions are executed using one trading program.

Wallman discloses:

wherein automatically acting includes posting the order to at least two market processes, and automatically ensuring that execution authority for the order is in a single point;

wherein the single point is a trading process;

wherein the order is associated with information indicating where execution authority for the order resides;

wherein the associated information indicates whether any market at which the order is represented is in process, and the single point is the in process market;

wherein the associated information is used to determine whether a process can declare itself to be the single point.

-see cols. 15-18 ,col. 40, lines 51-55, col. 43, lines 44-48, col. 26, line 65-col. 27, lines 1-28.

**Re claim 98:** Wallman discloses:

wherein automatically acting includes providing a preference designation of anonymous to the market process, and automatically participating in a trade at the market process with a contra-party trading process that is unaware of the



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identity of the trading process yet is able to obtain a preference rating from the market process for the trading process. -see col. 16, lines 23-36.

**Re claims 99-103:** Wallman discloses:

wherein automatically acting includes providing information to a preference updating process, and automatically deciding whether to trade with another market participant based on a preference rating of the other market participant determined by the preference updating process-see col. 27, lines 29-67;

wherein the information comprises a rule for determining the preference rating of the other market participant -see col. 15, lines 25-29; col. 22, para.5; and col. 30, line 32 - col. 31, line 14.

wherein the information comprises a rating for the other market participant-col. 30, line 32- col. 31, line 14;

wherein the preference updating process is part of a platform process see cols. 27- 29;

wherein the preference updating process is part of a market process.-see cols. 27-29.

**Re claims 104-105:** Wallman discloses:

wherein automatically acting includes posting the order to the at least one market process,

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receiving a trading proposal for the posted order from a contra-side trading process.-see cols. 11-12, 15, 22.

automatically determining how to respond to the trading proposal in accordance with a decision table having rules, each rule having at least one condition and at least one action to be taken when the condition is satisfied.-see Fig. 15 (157); cols. 23-27, 38-40.

**Re claims 106-108:**

wherein automatically acting includes registering in a crowd of the at least one market process, automatically receiving notice of an opportunity to improve upon a book price, automatically determining whether to improve upon the book price, and automatically providing a crowd price that improves the book price when the determination is positive.-see col. 11, lines 25-65; col.43, line 58 - col. 44, lines 1-28.

wherein the automatically determining is in accordance with a decision table. -see Fig. 15 (157)

wherein the automatically determining includes requesting an instruction from a user.-see col. 44, lines 58-63

**Re claim 111: Wallman discloses:**

Further comprising reporting results of automatically acting to a user. -see col. 33, lines 33-54.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 82-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman in view of Commodity (*Commodity Trading Manual*. Board of Trade of the City of Chicago. 1998.

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**Re claims 82 and 85:** Wallman discloses wherein the order is a short term option request, and the automatically acting includes requesting the short term option from the market process-see col. 40, lines 51-57.

Wallman does not specifically disclose:

the term of the option being less than one minute;

the term of the short term option is less than one second. It is well known in the art as evidenced by Commodity that ("an option can be exercised on any trading day up to and including its last day of trading.")-see p. 179 and the definition of option on p. 387 ("A contract that conveys the right, but not the obligation, to buy or sell a particular item at a certain price for a limited time.") Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wallman to include varying option terms as was disclosed by Commodity in order to provide the investor with choices of investment vehicles.

**Re claims 83, 84:** Wallman discloses receiving notice from the market process that the short term option was granted.-see col. 11, lines 46-65 , col. 33, lines 34-54, col. 40, lines 51-57 and forwarding the notice that the short term option was granted to an order room.-see col. 33, lines 34-54.

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4. Claims 87, 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman in view of Jain et al. (US Patent No. 6,343,278).

**Re claims 87 and 88:** Wallman does not disclose automatically canceling the affirmed shares from another of the at least one market processes and further comprising enqueueing an instruction to cancel at least one of the affirmed shares when the other market indicated that the at least one affirmed share was in process at the other market. Jain discloses ("The banknode will automatically cancel all the orders under the order limit...")-see col. 12, lines 6-10 and col. 11, lines 59-67 and col. 12, lines 1-25. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wallman to include automatically canceling an order as was done by Jain in order to prevent using an order limit to take unfair advantage of other traders, and to facilitate matching of trades.

5. Claims 109-110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman in view of More ( More Companies Buying Back Stock. The Salt Lake Tribune. Salt Lake City, Utah: April 9, 2000. pg. E.3.

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**Re claims 109, 110:** Although Wallman discloses various methods of risk/return analysis in cols. 29-33, Wallman does not specifically disclose:

wherein the order is associated with a liquidity curve, and automatically acting includes posting the order to the at least one market process that determines a premium offered or demanded for the order at a particular price based on the liquidity curve and that pairs the order in accordance with its premium;

wherein the market process determines the premium when the order is posted thereto.

It is well known in the art that supply and demand influence a stock price and are taken into consideration when trading securities as evidenced by More ("The basic economic principle says that as either supply shrinks or demand rises, a price will go up.")-see p. 2, para. 3. It would have been obvious to one having ordinary skill in the art at the time the invention was made to consider supply and demand and its affect on trading securities as shown by More in order to perform risk analysis and calculate premiums or discounts associated with the trading price.

***Response to Arguments***

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6. Applicant's arguments with respect to claims 1-111 have been considered but are moot in view of the new ground(s) of rejection.

#### **Conclusion**

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elda

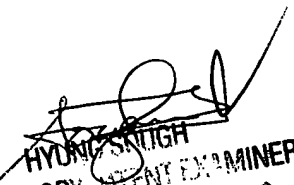
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Milef whose telephone number is (571)272-8124. The examiner can normally be reached on Monday - Friday 9:15 am to 5:45 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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HYUNG SKITCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3610